

**Citation for published version:**

Goeffry Hodgson, “Varieties of Capitalism: Some Philosophical and Historical Considerations”, *Cambridge Journal of Economics*, Vol. 40 (3): 941-960, January 2016.

**DOI:**

[10.1093/cje/bev083](https://doi.org/10.1093/cje/bev083)

**Document Version:**

This is the Accepted Manuscript version.

The version in the University of Hertfordshire Research Archive may differ from the final published version. **Users should always cite the published version of record.**

**Copyright and Reuse:**

This Manuscript version is distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Enquiries**

If you believe this document infringes copyright, please contact the Research & Scholarly Communications Team at [rsc@herts.ac.uk](mailto:rsc@herts.ac.uk)

# **Varieties of Capitalism:**

## **Some Philosophical and Historical Considerations**

Geoffrey M. Hodgson

10 November 2015

Hertfordshire Business School, University of Hertfordshire, Hatfield, Hertfordshire AL10 9AB, UK

### **KEY WORDS:**

varieties of capitalism, essentialism, definitions, Aristotle, Darwin, population thinking, historical specificity

JEL classification: B52

### **ABSTRACT**

The literature on varieties of capitalism has stimulated some authors to challenge notions of ‘essentialism’ and even the concept of capitalism itself. In this essay it is argued that the existence of varieties of capitalism does not rule out the need for, or possibility of, specification or definition of that type. Accordingly, ‘capitalism’ is still a viable term. The critique of ‘essentialism’ is also countered, after clarifying its meaning. In particular, it is pointed out that a suitably-defined ‘essentialism’ does not imply some kind of ontological or explanatory reductionism – ‘economic’ or otherwise. But while adopting what are basically Aristotelian arguments about essences, we need to reject Aristotle’s auxiliary notion that variety generally results from temporary deviations from a representative type or trend. Furthermore, capitalism is a historically specific and relatively recent system: we need to develop a classificatory definition of that system that demarcates it from other past or possible social formations.

# Varieties of Capitalism:

## Some Philosophical and Historical Considerations

### ABSTRACT

The literature on varieties of capitalism has stimulated some authors to challenge notions of ‘essentialism’ and even the concept of capitalism itself. In this essay it is argued that the existence of varieties of capitalism does not rule out the need for, or possibility of, specification or definition of that type. Accordingly, ‘capitalism’ is still a viable term. The critique of ‘essentialism’ is also countered, after clarifying its meaning. In particular, it is pointed out that a suitably-defined ‘essentialism’ does not imply some kind of ontological or explanatory reductionism – ‘economic’ or otherwise. But while adopting what are basically Aristotelian arguments about essences, we need to reject Aristotle’s auxiliary notion that variety generally results from temporary deviations from a representative type or trend. Furthermore, capitalism is a historically specific and relatively recent system: we need to develop a classificatory definition of that system that demarcates it from other past or possible social formations.

The literature on varieties of capitalism took off in the 1990s and continues ever upwards.<sup>1</sup> Driven both by empirical observation of manifest diversity of national capitalist systems, and by theoretical discourses on institutional complementarities and path dependence, it counters the traditional Marxist and market-fundamentalist notions that only one type of capitalism (or one developmental track for capitalism) is feasible, normal or desirable.<sup>2</sup>

In turn, this impressive body of research has prompted smaller counter-discourses that envision variety as a challenge to the idea of an ‘essence’ of capitalism or the very concept of capitalism itself.

---

<sup>1</sup> This article extends some material from Hodgson (2015a). For helpful critical comments, the author is very grateful to Marcel Boumans, David Gindis, Akshath Jitendranath, Jack Vromen, two anonymous referees and participants at the Fourth LRC Workshop on Varieties of Capitalism and Implications for Labour Relations Research, European University Institute, Florence, Italy, 29-31 May 2014, and in a seminar in Erasmus University Rotterdam on 23 February 2015.

<sup>2</sup> See, for example, Albert (1993), Hodgson (1996), Berger and Dore (1996), Crouch and Streeck (1997), Boyer (1999), Whitley (1999), Dore (2000), Amable (2001, 2003), Aoki (2001), Hall and Soskice (2001), Streeck and Yamamura (2001), Coates (2005), and Crouch (2005). Among others, Streeck (2011, p. 432 ff.; 2014, p. xii n.) and Bohle and Greskovits (2012, p. 10 ff.) refer critically to ‘the varieties of capitalism approach’, singling out one theoretical source, namely Hall and Soskice (2001). My use of the term ‘varieties of capitalism’ here is not intended to signify a theoretical approach, simply that there are real-world varieties of that system. There is also a related literature from the *régulation* school and elsewhere that postulates different kinds of regime of production, distribution or accumulation (Aglietta 1979, Albritton 1991, Amin 1994). Some of this literature supports a ‘stages theory’ of one-track capitalist development, but other elements sustain notions of potentially permanent divergence.

For example, writing from a feminist and post-Marxist perspective in a book originally published in 1996, J. K. Gibson-Graham (2006, p. 5) attempted a ‘critique of economic sameness (or of essentialism ...)’. Upholding ‘the irreducible specificity of every determination’, Gibson-Graham claimed that ‘a very powerful anti-essentialism is unleashed and enabled by this ontological reading’ (p. 27). Gibson-Graham’s emphasis on ‘irreducible specificity’ might be construed as a denial of the ‘capitalism’ concept when varieties exist.

As another example, Fred Block (2003, p. 294) wrote: ‘The term “capitalism” ... carries with it the implicit claim that economies organized around the pursuit of profit have a unified essence and should have similar institutional arrangements.’ As with Gibson-Graham, essentialism is taken to imply similarity or sameness. But no explanation is given why a common essence should imply similarity, and in what respects such similarity might appear. The determination of a category, such as mammals, humans or triangles, does not necessarily imply similarity within that category of size, colour, velocity, or whatever. That is, unless *essence* is taken to mean something different from its traditional philosophical meaning.

In the title of his provocative article that directly addressed the varieties of capitalism literature, Block asked: ‘varieties of what?’ Block (2012, p. 273) rightly observed: ‘But what is striking about this significant body of work is that virtually all of the emphasis was on “variety” and there was very little discussion of why it made sense to see these all as variations of a single type – namely capitalism.’ He added that ‘for both Marxists and for capitalism’s conservative defenders, the term capitalism retains an irreducible teleology or belief about the direction of history’ (p. 274). Block then contested the use of ‘capitalism’ as a category, stressing its manifest variety as a reason for junking the term. He also suggested that the term be abandoned because ‘it leads us to think that economic dynamics and processes are the key to understanding what is going on at any given moment’ (p. 281). He favoured the replacement of the term by Karl Polanyi’s (1944) concept of a ‘market society’. But this alternative category is no less vulnerable to his earlier claims concerning the limitations of the concept of capitalism.<sup>3</sup>

By contrast, in this essay I argue for the following eight propositions:

- (a) The existence of varieties of a type (such as capitalism) does not rule out the need for, or possibility of, specification or definition of that type.
- (b) The existence of varieties of a type does not rule out the existence of an *essence* for that type.
- (c) The existence of varieties of a type does not undermine suitably-defined *essentialism*.
- (d) A suitably-defined *essentialism* does not imply some kind of ontological or explanatory reductionism – ‘economic’, biological or otherwise.
- (e) Variety does not necessarily result from temporary deviations from a representative type or trend.
- (f) When addressing a huge variety of real phenomena, classificatory definitions involve ‘carving reality at the joints’: they demarcate one class of varied entities from another.

---

<sup>3</sup> Streeck’s (2012) response to Block stressed the relatively recent development of the monetary and financial institutions of the capitalist system, in line with the arguments of Schumpeter (1942), myself (Hodgson 2015a) and others. See also the first footnote in section 5 below.

(g) In the present context the relevant ‘joint’ to be ‘carved’ are changes that preceded and triggered the explosion in wealth-creation that started just before 1800.

(h) By 1800 markets had already existed for several millennia, and we are better served by a more-refined definition to demarcate the current epoch. For that purpose, ‘capitalism’ is a better term than ‘market society’.

As in biology, variation across a population does not preclude a common essence for a genus or a species. As Edward P. Thompson (1978, pp. 81-2) argued: ‘while there may be any number of permutations of breeds of dogs, and of mongrel cross-breeds, all dogs are doggy (they smell, bark, fawn on humans), so all capitalisms remain capitalist’.

In fact, the understanding of that common essence helps us appreciate the nature and scope of the variation or change. Definitions are vital to social science. At least from most Aristotelean-realist philosophical perspectives, definitions relate to essential features of the type defined. But identifying what is and what is not essential is very tricky.<sup>4</sup> Definitions are also classificatory devices. We never reach fixed and final statements that are devoid of ambiguity or the need for further refinement.

Anti-essentialism has been used as an excuse for avoiding definitions. But shared meanings are necessary for communication and mutual understanding. The more abstract and complex the discourse, the more serious this problem becomes. Even ‘anti-essentialists’ or ‘anti-realists’ must use words carefully and attempt to communicate intended meanings. Absolute precision, like absolute cleanliness, is impossible; but that does not imply that we should abandon our duties of linguistic housekeeping or personal hygiene.

My argument takes much from Aristotle, particularly in sustaining propositions (a), (b), (c) and (d) above. But I also follow Elliott Sober (1980) in an important but largely overlooked paper that distinguishes between Aristotle’s concept of essence and what Sober describes as the Aristotelian ‘natural state model’.<sup>5</sup> Block (2012) seemed to have something like the natural state model in mind when he criticised both Marxists and defenders of capitalism for having their own ‘teleology or belief about the direction of history’ (p, 274). Sober argued that one of Charles Darwin’s great philosophical insights was his use of ‘population thinking’ to remove the natural state model.<sup>6</sup> So my proposition (e) is against this aspect of Aristotle’s thought, and instead with Darwin. We end up with a synthesis involving parts of both. It becomes clear that Karl Marx in particular adopted both Aristotle’s essentialism and his natural state model. Furthermore, in neglected passages in the work of Thorstein Veblen, the

---

<sup>4</sup> The word *essential* is ambiguous. It can refer to something that is part of the essence of a kind, or to something that is vital to its existence. Unless otherwise indicated, *essential* here shall refer to part of the *essence* of a type. Note also that some philosophers defend definitions while being critical of the concept of essence, notably Robinson (1950). But the defence of essentialism here is necessary to remove the grounding of many objections to the pursuit of clear definitions of types in social science.

<sup>5</sup> Sober (1984) reiterates the key argument. A supportive discussion of Sober’s (1980) article is found in Godfrey-Smith (2009).

<sup>6</sup> In invoking Darwin, I follow Veblen and others in implying neither biological reductionism nor the ‘survival of the fittest’ (Hodgson and Knudsen 2010). Making philosophical claims for Darwin may surprise some readers. The leading biologist and philosopher of biology Ernst Mayr (1964, p. xviii) wrote: ‘It has taken 100 years to appreciate fully that Darwin’s conceptual framework is, indeed, a new philosophical system’. A survey of about one thousand academic philosophers organized by the *Philosopher’s Magazine* put Darwin’s *Origin of Species* as the third most important book in philosophy ever, after Plato’s *Republic* and Kant’s *Critique of Pure Reason* (*The Guardian*, 21 September 2001).

American institutionalist identified defective ‘natural state’ thinking in mainstream economics as well. But with propositions (f), (g) and (h) I am also closer to Marx, Weber, Schumpeter, Commons and several others.

The following section considers the origins and meanings of the terms ‘essentialism’ and ‘anti-essentialism’ and argues that a version of ‘essentialism’ is vital for science. Section two considers essentialism without the natural state model, where this model implies some tendency to gravitate towards a representative type or trend. Section three considers historical and empirical factors that must be taken into account when defining capitalism. Section four considers the nature and role of definitions in general terms. Section five offers a definition of capitalism and concludes the paper.

## **1. Anti-anti-essentialism**

Aristotle’s notion of essence has been challenged many times. The medieval debate between nominalists and realists opened up such a controversy. Empiricist philosophers have described essences as ‘fictions’. We defend some notion of essence below. But it is important to note that rejection of the notion of essence does not imply that definitions can be avoided. Nevertheless, as also argued later, definition and essence can be related. First we must address the massive ambiguities surrounding the word ‘essentialism’.

The term ‘essentialism’ was allegedly invented by leading philosophers Karl Popper or Willem van Orman Quine (Wilkins 2012), but they used it in contrasting and challengeable ways. Quine (1960, 1966) faulted ‘essentialism’ on the grounds that if we considered a single entity, it was generally difficult and often impossible to disentangle essential from accidental attributes. A person is characterized by features that others do not possess – such as blue eyes – so they are accidental for humans as a whole but not for the individual concerned. Among several problems in his account, Douglas B. Rasmussen (1984) pointed out that that Quine had shifted the discussion of essences from Aristotle’s species or kinds, to a single individual. This was a key error; it is only when we address species or kinds that the distinction between essential and accidental features becomes sufficiently meaningful.<sup>7</sup>

Popper (1945, 1963, 1972) criticised ‘essentialism,’ but he gave it a different meaning. For him, essentialism was not about identification but explanation. Hence Popper (1945, pp. 25 ff.) critiqued ‘methodological essentialism.’ Later Popper (1963, pp. 103-4) wrote: ‘The essentialist doctrine I am contesting is solely *the doctrine that science aims at ultimate explanation*; that is to say, an explanation which (essentially, or by its very nature) cannot be further explained, and which is in no need of further explanation.’ But this is not the version of essentialism defended in the present essay, which involves the assertion of the existence and meaningfulness of essences. Popper (1963, p. 104) himself went on to say that his criticism ‘does not aim at establishing the non-existence of essences.’ So in this vital respect his view does not conflict with that proposed here. Popper was attacking a view of science rather than the notion of essence.

Another apparent challenge to essentialism derives from the American pragmatist tradition, stretching from Charles Sanders Peirce (1878), through John Dewey (1929) to Richard Rorty (1979). Peirce and Dewey criticized claims that essences are always knowable. But

---

<sup>7</sup> Robinson (1950, pp. 154-6) made a similar criticism of the concept of essence. Relatedly he downplayed the role of definition in classifying groups of varied or varying entities, beyond single or unchanging things. White (1972) argued persuasively that Quine’s account of Aristotle is inaccurate in several respects and has led to a widespread miss-specification of the Greek philosopher’s position (Wilkins 2009, 2012).

sophisticated essentialists would not uphold that they are. Furthermore, both Peirce and Dewey embrace forms of realism or naturalism, which would typically imply some commitment to types or kinds of entities.<sup>8</sup>

The version of essentialism adopted here upholds that essences are meaningful and real, even if we are unaware of them, or we cannot agree what they are. For any kind of entity there is a set of characteristics that all entities of that kind must possess for it to be that kind of thing, and if it does not possess them, then it will be another kind of thing. This should not be confused with foundationalism, which is the view that all knowledge can be grounded on some foundation such as reason, sensation or experience. Essentialism here is an ontological doctrine; foundationalism concerns epistemology. Likewise, essentialism here has nothing to do with correspondence or spectator theories of truth, which are also epistemological doctrines.

Dewey and Rorty rejected correspondence theories of truth, as well as foundationalism. When Rorty rejected 'essentialism' it too was given a peculiar meaning, related to the linguistic and political themes of his work. Consequently, the above-cited authors and arguments do not undermine the kind of essentialism adopted here. The notion of essences, in the Aristotelian sense of referring to kinds, is preserved. Influential philosophers such as Saul Kripke (1972) and Hilary Putnam (1975) have restored the reputation of essentialism, claiming that it is the task of a science to investigate the essential properties of the types of entity that it may address.

We should not ignore the role of the French in all this. Writing in 1957, the philosopher Roland Barthes explored in his *Mythologies* how words can be used to assert particular values and become instruments of power for the media and the bourgeoisie. Fair enough. But then Barthes (1972, p. 75) went too far and condemned: 'This disease of thinking in essences.' The fact that words can be instruments of power does not mean that we can or should abandon words. Social scientists have a duty to use words as precisely as possible. Enquiry is a social process. To carry out an investigation we have to communicate and refer to objects of analysis. This is not a disease. It is a vital part of science, without which it dies.

In his *For Marx*, Louis Althusser (1969) developed his concept of *overdetermination*, which roughly means that a single observed effect is simultaneously determined by multiple different causes, where fewer of them might be enough to account for the phenomenon. Althusser linked this to the Marxist idea of contradiction. Overdetermination signified internal, conflicting forces within a complex whole. Several Althusserians then argued that to focus on relatively few essential features was mistaken. Some went further, to claim that any account of an essence is a mistake. As far as I am aware, Althusser himself did not take that step, but he inspired others such as James Tomlinson (1982), Ernesto Laclau and Chantal Mouffe (1985), Barry Hindess (1987), and Stephen A. Resnick and Richard D. Wolff (1987) to move in this direction.

It is indeed necessary to understand a complex entity such as capitalism in terms of structurally dissimilar – or 'contradictory' – elements. Because multiple varied elements are part of the system, then it is necessary to understand it in terms of these dissimilar parts. But that raises a number of further questions, which I shall address later. Crucially, despite claims

---

<sup>8</sup> Note that I avoid the term 'natural kind' here, because it may connote things that are indifferent to our classifications or descriptions of them. 'Kinds' or 'types' in the social world can be themselves affected by our categorizations, as in Hacking's (1999) notion of 'interactive kinds.'

to the contrary, Althusser's concept of overdetermination does not counter the need or possibility of describing essences.<sup>9</sup>

Considering the essence and meaning of a market, Hindess (1987, p. 149) wrote: 'To write of essentialism in this context is to say that the market is analysed in terms of an essence or inner principle which produces necessary effects by the mere fact of its presence.' In a forensic response, John O'Neill (1998, p. 10) regarded this as 'a caricature of what it is to say that an entity has an essence.' Instead of 'necessary effects,' an essence involves dispositions, and 'it does not follow that these dispositions are always exhibited. ... The criticisms are aimed at a position that nobody holds.' O'Neill (1998, 2001) emphasized that essence precedes discovery, many essential properties are dispositional properties that are actualized only in certain circumstances, and some essential properties depend upon others. O'Neill (1998, p. 9) explained:

The essential properties of an entity of a particular kind are those properties of the object that it must have if it is to be an object of that kind. Accidental properties of an entity of a particular kind are those properties it has, but could lack and still be an entity of that kind.

O'Neill also countered claims that Ludwig Wittgenstein (1960) criticized essential properties. After a detailed examination of Wittgenstein's text, O'Neill (1998, p. 14) concluded:

The legitimate conclusion to be drawn from Wittgenstein's discussion is that one cannot assume in advance that there must be a set of essential properties shared by all entities that fall under some concept, not that there no essential properties of objects.

But that was not the end of the story. By the 1980s essentialism had become a global term of abuse among anthropologists, feminists and many others. Essentialism became a catch-all word for many varied sins, including biological reductionism, economic reductionism, the notion of knowledge as representation, the imposition of Western values on other cultures, and over-generalizations concerning gender differences (Fuss 1989, Nussbaum 1992, Assiter 1996, Sayer 1997). But essentialism does not itself imply that the (human) essence is biological, cultural, or economic. The essence of a kind can be social, biological, physical, chemical, ideational or whatever, including often a combination of these: it all depends on the nature of that kind.<sup>10</sup> Finally, claiming that essences exist does not imply that knowledge is representation: ontological and epistemological claims are different in character.

The rise of social constructivism led to further 'anti-essentialist' rhetoric. After declaring her own 'anti-essentialism' in her *Introduction to Social Constructivism*, Vivien Burr (1995, p. 4) explained: 'Since the social world, including ourselves as people, is the product of social processes, it follows that there cannot be any given, determined nature to the world or people.' But this does not follow. The social world – like anything else – is clearly the product of processes, but we cannot infer from this that it lacks any 'given' or 'determined' nature. The

---

<sup>9</sup> With little supporting argument, Gibson-Graham (2006, p. 25) contended that 'the Althusserian concept of 'overdetermination' has been such a powerful contribution to Marxian anti-essentialism.' But Gibson-Graham adopted an imprecise notion of 'essentialism' that differs from the one used here.

<sup>10</sup> Block's (2012, p. 281) claim that the word capitalism inevitably leads to a privileged stress on 'economic dynamics and processes' is also unfounded. It all depends on what concept of capitalism is deployed. Commons (1924), Galbraith (1952) and many others have argued that political or legal structures are part of the fabric of capitalism, and by implication its confinement to some (undefined) notion of the 'economic' (at least in their discourse) would be unwarranted.



fact that a thing is created, or in movement, does not mean that it lacks an essence. Burr continued: 'There are no "essences" inside things or people that make them what they are.' First, an essence is a property and it is not strictly 'inside' the entity. Second, if things lack factors 'that make them what they are,' then how can we account for their existence? Third, the defining properties of a type are generally insufficient to constitute that type, or 'make them what they are.' Mass and structure help make things 'what they are.' But these are not necessarily defining properties. Burr also depicts essentialism as involving the view that persons have 'some definable and discoverable nature, whether given by biology or by the environment.' Essentialists believe that there is such a thing as human nature, which helps define the essence of being human. But, contrary to Burr, essentialism does not imply that essences are always discoverable.

In the 1980s, anti-essentialist rhetoric swept through several areas of enquiry, impairing social theory and its reputation. As Martha Nussbaum (1992) noted with concrete examples, anti-essentialism joined forces with normative cultural relativism (where one culture is deemed as good or bad as any other) even to defend traditional but harmful practices in the developing world. As Diana Fuss (1989) jested, an obsession with anti-essentialism has become the 'essence' of social theory. Fuss (1989, p. xi) further wrote: 'Few [other] words in the vocabulary of contemporary critical theory are so persistently maligned, so little interrogated, and so predictably summoned as a term of infallible critique.' But she too was obliged to describe herself as an anti-essentialist. It had become a necessary shibboleth.<sup>11</sup>

## **2. Essentialism without the natural state model**

The leading philosopher of biology Ernst Mayr (1963, 1976, 1982, 1988) argued that one of Charles Darwin's (1859) greatest achievements was 'population thinking.' This surpassed the alleged 'typological essentialism' or 'typologism' of Plato or others, where variety in a population is ignored to concentrate instead on an average, typical or representative individual, to serve as a surrogate for the whole species. By contrast, in population thinking, variation is all-important. Variation is a key feature of any species; it is the evolutionary fuel for natural selection. Consequently, the essence of any species cannot be understood without encompassing that variation.

Population thinking is relevant for economics as well as biology. When addressing an industry or economy, economists sometimes use simplifying notions such as the representative firm or the representative individual. But this simplification suppresses the variety in the population, which can account for distinct dynamics and serve as the fuel of evolutionary selection and change (Metcalf 1988, Nelson 1991, Kirman 1992, Hodgson 1993).

Does population thinking amount to a rejection of essentialism? David Hull (1965) – who studied under Popper – thought so. Mayr (1982, p. 38) himself cited Popper on essentialism and rejected any conception of 'a limited number of fixed and unchanging forms ... or essences.' But a commitment to essences does not itself imply that forms are fixed or unchanging. Mayr's 'population thinking' does not imply a general rejection of the notion of

---

<sup>11</sup> More recently, from a Marxist perspective, Chibber (2013) has criticised writers in the 'post-colonial' school who have rejected the idea that a single 'essence' of capitalism can apply to developed and less-developed countries. From the perspective of this essay, this is an open question. It needs to be debated to what extent developing countries can be regarded as capitalist. In any case, this is no basis for rejecting the concept of essence.

essence. We should not here be misled by his critique of what he described as ‘typological essentialism.’

In a neglected article, philosopher of biology Elliott Sober (1980) made a major breakthrough. Instead of seeing population thinking as a negation of essentialism, he argued that the problems lay elsewhere. Sober argued that the classical essentialism of Aristotle involved additional questionable assumptions that had been given insufficient attention. For Sober (1980, p. 350) the key problematic addition in the Aristotelian account was the ‘natural state model’ and its use to explain variation. It is this – and not essentialism as such – that ‘clashes with evolutionary theory.’ Sober (1980, p. 360) explained the natural state model as follows:

Aristotle's hypothesis was that there is a distinction between the natural state of a kind of object and those states which are not natural. These latter are produced by subjecting the object to an interfering force. ... Variability within nature is ... to be accounted for as a deviation from what is natural.

With the natural state model, ‘variation is deviation caused by interfering forces’ (p. 364) and hence ‘the search for invariances takes the form of a search for natural tendencies’ (p. 370). By contrast, Darwin brought about a great transformation in our thinking, involving ‘the realization that this diversity itself constituted an invariance, obeying its own laws’ (p. 365). Consequently: ‘Individual differences are not the effects of interfering forces confounding the expression of a prototype; rather they are the causes of events that are absolutely central to the history of evolution’ (p. 371).<sup>12</sup>

Multiple co-existing capitalisms, or competing firms in an industry, have to be understood in population terms. Crucially, variation within a population (of capitalisms or of firms) is part of its species essence, rather than a disturbance from one natural state. The essence itself embraces variation. We cannot identify an essence by seeking an illusory natural state for the species. Instead, as Sober (1980, p. 354) put it: ‘A species essence will be a causal mechanism which works on each member of the species, making it the kind of thing it is.’

Of course, there will always be problems drawing the line between what is a member of the species and what is not. For Sober: ‘Essentialism is in principle consistent with *vague essences*’ (p. 358). Sober construed ‘essentialism as a fairly flexible doctrine which, in at least some circumstances, can be seen to be quite consistent with the existence of insoluble line-drawing problems’ (p. 359). Consider entities that are constantly undergoing change. Given the variation in a population, some things may alter without changing their species essence. But there may come a point where alterations lead to a change of essence, at which point the entity becomes another kind of thing. But this does not mean the thing in question never had an essence.

How could this affect our understanding of varieties of capitalism? Versions of the natural state model are widespread in popular and academic discourse on capitalism, among both advocates and critics of the system. Marx was not simply an essentialist (Meikle 1985). He also adopted a version of Aristotle’s natural state model. Marx (1976, p. 90) declared in the

---

<sup>12</sup> Darwin long wondered what the ‘laws’ of variation were; in other words he searched for an explanation of why members of a species differ. He provided a partial explanation – as with the Galapagos finches – in terms of natural selection and consequent generation-by-generation adaptation to different environments. But he was unaware of genes and of the modern theory where the source of variety is largely explained by genetic mutation and recombination. These genetic ‘laws’ help to explain *permanent* variation and divergence.

Preface to the first edition of *Capital* of 1867 that he was following physicists by studying the capitalist mode of production in its 'most typical form ... least affected by disturbing influences' and hence closest to its 'pure state.' He declared that England was then the '*locus classicus*' for capitalism, and that Germany among others would follow down the same road.

Marx promoted a modified natural state model, where the natural state of the entity is not a single outcome, but a single path of development. Variation from this path would be short-lived and due to a 'disturbing influence,' rather than the opening of a new road ahead. Apart from these disturbances, every country is regarded as more-or-less obliged to follow down the same path.

This natural state model was adopted by subsequent leading Marxists, even when acknowledging manifest varieties of capitalism. For example, with his so-called 'law of uneven and combined development', Leon Trotsky underlined both the separate development and global integration of different capitalisms.<sup>13</sup> Trotsky's (1934, p. 22, 1936 p. 19) vivid but rather imprecise explanations of the 'law' highlighted episodes of individual countries 'skipping a whole series of intermediate stages' where capitalism 'gains mastery only gradually over the inherited unevenness.' Trotsky continued to explain that capitalism 'constantly aims at ... the surmounting of economic differences ... Thereby it brings about their *rapprochement* and equalizes the economic and cultural levels of the most progressive and the most backward countries.' By ending up with these claims that differences gradually disappear, Trotsky retained Marx's natural state model of capitalism. By contrast, much of the varieties of capitalism literature upholds that countries may never equalize or converge. Rather than 'skipping stages' down one route, they may forge substantially different developmental paths.

A version of the natural state model is also found in works more favourable to capitalism. For example, Francis Fukuyama (1992) famously declared that Western liberal-democratic capitalism was the end-state of historical evolution for all politico-economic systems. Fukuyama has since modified his position, but it is easy to find other examples of the idea that capitalism has a natural state toward which it gravitates. Often this natural state is deemed to be a Western-style capitalist economy.

The post-1990 literature on varieties of capitalism challenged both traditional Marxist and pro-capitalist natural-state doctrines. Instead of the idea that all capitalisms would eventually find approximately the same track and destination, this literature gave explanations for enduring differences between capitalisms. These included the influences of different cultures, path dependence, and institutional complementarities. Here we note that the varieties-of-capitalism approach was partly an implicit revolt against the natural state model.

For instance, a number of studies point to possible complementarities between the interacting institutions of industry and finance in any given capitalist system (Aoki 2001, Hall and Soskice 2001, Gagliardi 2009). Masahiko Aoki (2001), for example, argued that the Japanese 'main bank system' of finance complements particular modes of management in industry, and team-based work incentives. Trying to adjust one set of institutions in this configuration without addressing the others can reduce the overall effectiveness of the arrangement. Trying to change all these institutions at once is ostensibly impossible. Hence Japanese capitalism represents a distinct path of development, without strong gravitational

---

<sup>13</sup> The meaning of Trotsky's 'law' is insufficiently clear. As Elster (1986), Rosenberg (2010) and others have pointed out, it might amount to little more than the weak empirical claim that development is both connected and uneven.

tendencies toward (say) Western capitalism. More broadly, surveying several such complementarities in different capitalisms, Bruno Amable (2000, p. 645) concluded that ‘no generalized pattern of convergence toward the same equilibrium model should be expected, in spite of “globalization”’. All this signals a departure from the natural state model and an embrace of population thinking.

Economists rarely refer to the natural state model, or seem to be aware of the underlying philosophical issues. A rare exception is Veblen, who had an acute grasp of philosophy. In his critique of the neoclassical economics of John Bates Clark, Veblen (1908, pp. 154-5) noted that Clark’s treatment of dynamics assumes a ““natural” state in which the phenomena of economic life are assumed to arrange themselves in a stable, normal scheme.’ Furthermore, ‘Mr. Clark’s use of the word “dynamic” involves ‘a speculative inquiry as to how the equilibrium re-established itself when one or more of the quantities involved increases or decreases.’ Clark’s dynamics were about disturbing forces acting upon equilibrium and being corrected by negative feedback; lacking were qualitative changes and ongoing evolution. Later Veblen (1925, p. 51) extolled ‘evolutionary’ principles that

hold attention to the changes that are going forward, rather than to focus it on that ‘Natural State of Man’ as Nassau Senior calls it, to which the movement of history was believed inevitably to lead. The question now before the body of economists is not how things stabilize themselves in a ‘static state,’ but how they endlessly grow and change.

Veblen thus rejected the idea of a single, natural socio-economic order. His rejection of the natural state model was an early step in making economics a Darwinian and evolutionary science.<sup>14</sup> But this did not imply a rejection of essentialism, as defined here.

### **3. Carving reality at the joints: degrees of generality or specificity**

Given that populations are collections of varied entities, and we cannot identify their essence by assuming that they all are gravitating to some ‘natural state’, we require some other criterion to distinguish populations of one type (or species) from populations of another. We need to identify the essential distinguishing characteristics, or to ‘carve’ reality ‘where the joint is,’ as Plato reported of Socrates in *Phaedrus*. We need to distinguish the essential from the accidental features of natural or social kinds. In practice we do this all the time, such as when we identify a group of people as familiar friends, even though they have changed their clothes and are doing different things.

But what is deemed accidental or essential depends on the degree of generality we are seeking in locating the type of entity to be defined. Defining birds is different from defining finches. Among the class of birds is the genus of finches. To define finches we need a fuller description of essence than when defining birds, where some characteristics that are accidental for birds as a whole become essential for finches. Going further, to define a specific species of finch – such as a chaffinch – we need to make the description of its essence even more detailed.

The problem of choosing the level of generality or specificity arises with definitions of capitalism. Many define capitalism simply as a market system with private property. This broad definition concentrates on the (private) form of ownership and the (market) mechanism of distribution. In this approach, other features such as finance, corporate power and the employment relationship are secondary. Whether they are added to the definition or not

---

<sup>14</sup> Veblen never completed his aim of elaborating the implications of Darwinism for economics (Hodgson 2004).

makes a big difference. It is not simply a matter of differentiating birds from finches; it affects our identification and hence our conception of the longevity and generality of the system.

Consider some historical facts. In the first 1700 years after the birth of Christ, world GDP per capita increased by an overall factor of about 3.5 (Maddison 2007). But sometime after 1700, GDP per capita began to take off in Europe, and accelerated further upwards around 1800, sending developmental (and militaristic) shockwaves around the world.<sup>15</sup>

In terms of GDP per capita, four countries successively led the way. Italy had the highest GDP per capita in Europe in the fifteenth century. It was overtaken by the Netherlands in the late sixteenth century, which in turn was overtaken by the United Kingdom in the early nineteenth century. Then the USA became global leader around 1900. Some new form of social organization emerged in this period. It was refined as each new pioneer built upon and developed the dynamic institutions of its predecessors.

Western European GDP per capita was about 20 times larger in 2003 than it was in 1700. World GDP per capita in 2003 was about 11 times larger than it was in 1700. In less than half the time, US GDP per capita in 2003 was about 12 times greater than it was in 1870. But global growth since 1700 has also seen a widening gap between rich and poor nations (Milanovic 2011).

Nevertheless, as a result of technological developments in medicine and the improved average standard of living, between 1800 and 2000 life expectancy at birth rose from a global average of about 30 years to 67 years, and to more than 75 years in several developed countries (Riley 2001, Fogel 2004, Deaton 2013).

Something happened to cause this unprecedented explosion in production, innovation and human longevity. What were the changes in the leading countries before 1800 that caused the subsequent take-off? To be sure, technology was a necessary condition of much progress, and many explosions in productivity have resulted from new technologies – from steam engines to modern electronics. But what were the necessary conditions for the development and diffusion of new technology? Property rights helped provide incentives for investors, and finance was required to purchase materials and labour power. There had to be networked communities of scientists and engineers, to scrutinize, share, and develop ideas. These communities required political conditions allowing relatively free and open enquiry, with the uncensored publication of much scientific information. These necessary conditions involve a constellation of political, legal, social and economic institutions.

How do the above facts and possible explanations relate to the definition of capitalism? Deirdre McCloskey (2010) ruled out the possibility that the rise of capitalist institutions can have any explanatory role post-1700 because, for her, capitalism was defined in terms of ‘markets’ (by which she meant any kind of trade) and the ‘market economy has existed since the caves’ (p. 16). For her: ‘Market participants are capitalists’ (p. 260). From this it seems that markets are sufficient to imply capitalism. She was not alone in posing a very broad definition of this system. For example, the historian Alan Macfarlane (1978, p. 178) declared: ‘England was as ‘capitalist’ in 1250 as it was in 1550 or 1750.’

Block’s adoption of Polanyi’s concept of ‘market society’ offers an early and unclear dating. We may define markets more narrowly than trade in general. They are forums and

---

<sup>15</sup> Gross Domestic Product (GDP) measures have been criticized for several reasons, including their neglect of unpaid work and environmental damage (Costanza et al. 2014). Prominent alternative measures of economic activity show less rapid progress since the 1970s.

institutions through which multiple buyers or multiple sellers recurrently exchange rights to a substantial number of similar commodities of a particular type. Markets, in short, are organized recurrent exchange (Hodgson 1988). By this definition, markets may have first appeared about 5000 years ago in China and about 2600 years ago in the Middle East (Hodgson 2015a). But Polanyi et al. (1957) questioned whether the existence of these early markets meant the existence of a 'market society'. He argued that markets did not have a major impact upon economies until modern times. By contrast, Peter Temin (2002) examined recorded price data of goods from Babylon from 464 to 72 BC and concluded that the longer time-series of apparently responsive and readily adjustable prices was evidence of market forces in operation. Temin (2001, 2006) also argued that the Roman Empire contained developed and interlocking markets with variable prices. If by a 'market society' we mean a system when land, labour and capital have become commodities, then there is evidence in ancient societies of wage-labour, land sales, and banking. So the dating of the inception of 'market society' is open to dispute. Offers range from a couple of hundred, to several thousand, years.

If Temin is right, this does not mean that Ancient Babylon or Rome were capitalist. Under adequate definitions, markets are a necessary but insufficient condition for capitalism. Something else must have been added to markets to make capitalism take off after 1700.

Regrettably, definitions of capitalism simply in terms of markets or private property are commonplace. The *Compact Oxford English Dictionary*, for example, defines capitalism as: 'An economic and political system in which a country's trade and industry are controlled by private owners for profit, rather than by the state.' If we insert 'most of' before 'a country's' and treat 'profit' loosely as pecuniary gain, then by this definition, capitalism has been around for thousands of years. Its appearance long ago would have little connection with the post-1700 explosions in productivity.

It would make more sense to define capitalism more narrowly, and apply it to something that became prominent in leading countries in the seventeenth and eighteenth centuries. Defining capitalism more restrictively means adding some further stipulations to the definition, other than mere 'markets' or 'private ownership.' We have to identify the kind of system that emerged in the eighteenth century and led to explosive growth.

That does not mean that the additional stipulations are arbitrary or merely descriptive. Our observational focus is a massive growth of productive activity, so we must concentrate on the economic core of the system – the engine of massively growing production of goods and services. What defines this new core? What fundamental changes occurred to account for the extraordinary technological progress and explosion in productivity?

Could it be wage labour? In the third volume of *Capital*, Marx (1981, p. 1019) saw wage labour as a 'characteristic trait' of the capitalist mode of production. But using this as a criterion is not straightforward. Extensive wage labour dates from medieval times. But widespread *industrial* wage labour emerged much later. As late as about 1803, when the Industrial Revolution was under way, industrial labourers (excluding agriculture and the armed forces) made up about 21 per cent of heads of households (Lindert and Williamson 1982, p. 400). Marx's vision of a large industrial proletariat was realized in England no earlier than the nineteenth century. But why should the demarcation criterion focus solely on *industrial* wage labour?

Marx put insufficient emphasis on the empowering role of the financial system and its use of debt to capitalize production (Ingham 2008, Hodgson 2015a). Instead he concentrated on the emergence of wage labour, and the organization of labour as the primary driving force.

The definition of an entity cannot include everything that is vital for the existence of that entity. Such an impractical definition would consist of an unending list of everything required for everything within the system to function.

But adding the financial system to Marx's definition of capitalism would help us date the emergence of the system in Western Europe. After the establishment of the Bank of England in 1694, other major developments in British financial institutions emerged in the eighteenth century.<sup>16</sup> It is reasonable to consider an alternative finance-oriented definition of capitalism alongside the Marx-style definition highlighting the employment relationship.

#### **4. On classificatory definitions**

There are different types of definition (Robinson 1950). Definitions in mathematics play a different role than in the social sciences or biology. When a triangle is defined as a polygon with three sides, this is a clear-cut assumption. Mathematical definitions play an axiomatic role. By contrast, the problem of defining capitalism is primarily one of classification – of separating capitalist systems from those that are non-capitalist.

In his *Posterior Analytics*, Aristotle (1901, book 2, chs 8-10) distinguished between nominal and real definitions. A real definition involves an explanation of the origin and nature of a type of entity: it is an account of its essence. By contrast, we are first concerned here with demarcatory definitions, which are close to what Aristotle described as 'nominal' definitions. Especially given the complexity of capitalism and its origins, we need to agree first what we are talking about, before we explore its evolution or nature in more detail.

In both the social and the biological worlds we have difficult problems of identifying species, often with no pure types. Here the role of a definition is to demarcate and assign a term to a type of entity: to distinguish one species from another, with possible fuzziness and boundary cases. Nevertheless, clear-cut and fuzzy-boundary definitions both have the principal purpose of demarcating a type; their role is not to analyze functioning or development. A definition 'should be empty of assertional content beyond its ability to explain meaning' (Belnap 1993, p. 122). After defining a type, analysts then have the big job of understanding the origin, nature, structure, composition, survival, operations and functions of this type of entity. The definition is a necessary preliminary step – to ensure that the analysts are talking about the same thing. Although definitions are affected and updated by ongoing analysis, definition and analysis are different tasks.

Hence a demarcatory definition of (say) capitalism is not a theoretical analysis of capitalism. Also a definition of capitalism is not a list of characteristics that are vital for capitalism to exist. It may be simple but is not a simplifying assumption. It does not give us analytical licence to ignore important features that do not appear in the definition. A mammal has been defined as an animal that suckles its young. This tells us very little of the origins or nature of mammals, it ignores other vital features such as brains, limbs, skeletal frames, and warm blood. Yet it is a definition that has served well to identify a kind of animal.

The kind of definition we require involves a minimal list of characteristics that can differentiate capitalism from other social formations. Its primary purpose is to ensure that researchers can communicate their meaning effectively when using a category such as *capitalism*. They may not agree on a definition, but it is vital to understand what a researcher

---

<sup>16</sup> See Powell (1915), Bagehot (1919), Dickson (1967), Kindleberger (1984), Roseveare (1991), and Wennerlind (2011).

means by the term when he or she uses it. This preliminary understanding is necessary before the researchers try to explain the emergence or functioning of the class of entity involved. This does not rule out the possibility that ongoing analysis may prompt researchers to refine their definition. This often happens. Indeed, the institutional focus of the following proposed definition of capitalism is prompted by claims concerning the role of institutions. Notwithstanding this, an act of definition is different from an act of description, simplification or analysis.

Realist approaches relate definitions to essences. In his *Topica*, Aristotle wrote: ‘A definition is an account that signifies the essence’. Note that he used the verb ‘signify’, rather than ‘describe’ or ‘explain’. We need a sign: we have to find a common feature that signals the nature of the beasts, and it is sufficient to demarcate them from the others. Classificatory definitions do not need fuller descriptions or explanations.

But the notion of essence comes in at the next step. For example, the eighteenth-century biologist Carl Linnaeus classified plants and animals according to their structural similarities. Hence plants were classified largely according to their number of stamens. Then our enhanced understanding of evolution after Darwin revealed that structural similarities do not necessarily signal a common evolutionary lineage. The focus then shifted to evolutionary (phylogenetic) classifications and taxonomies.

A classificatory definition of capitalism would, in part, be similarly ‘tested’ according to whether the systems so classified had a common nature and similar causal origin. Notably, while some component capitalist institutions (such as property and markets) may have evolved independently in different locations, we know that global interactions played a major part in the emergence and evolution of all individual capitalist systems (Hodgson 2015a). As with the case of the Linnaean taxonomy, future advances in theoretical understanding can lead to changes in classificatory definitions. Generally, the usefulness and persuasiveness of a classificatory definition depends in part on whether it points to a common essence – whether it relates to a class of entities that share a common nature and a similar causal origin.

The definer has also to persuade others that the identification of a particular class of entities (even if well understood) would point to useful, further theoretical and empirical exploration. In the case of capitalism, the currently widespread usage of the term gives some possible evidence of its relevance. The unfulfilled task is to establish a consensus on a more adequate classificatory definition.

## **5. A definition of capitalism and a conclusion**

It is beyond the scope of this essay to justify a particular definition of capitalism, but I indicate a preferred formulation to illustrate a possible definition and its role. Other rival definitions may be viable. Building on the work of others, elsewhere (Hodgson 2015a) I make the full case for the following definition, where capitalism is defined as a socio-economic system with the following six characteristics:

1. A legal system supporting widespread individual rights and liberties to own, buy and sell private property.
2. Widespread commodity exchange and markets, involving money.
3. Widespread private ownership of the means of production, by firms producing goods or services for sale in the pursuit of profit.
4. Much of production organized separately and apart from the home and family.



5. Widespread wage labour and employment contracts.
6. A developed financial system with banking institutions, the widespread use of credit with property as collateral, and the selling of debt.

In this case there are two optional, five-point, variant definitions, namely **S-capitalism** (in honour of Schumpeter), which omits point (5) concerning employment, or **M-capitalism** (in honour of Marx), which omits point (6) concerning finance, credit, collateral and the selling of debt.<sup>17</sup> The argument is made elsewhere for adopting all six points (Hodgson 2015a).<sup>18</sup>

To adapt a lapsed advertising slogan from a famous British retail company, capitalism is ‘not just’ markets and private property, but *M&S capitalism* – or *capitalism* for short. Conditions (5) and (6) serve as fuzzy historical book-ends, together demarcating capitalism from preceding systems and possible successors. But as with all definitions, there is no supreme court that can offer a final verdict on the alleged superiority of any formulation. The merits and demerits of different definitions have to be debated. The above six-point definition serves an illustrative purpose here, and it would take at least another article to justify the details.

Whatever the ins and outs of a particular definition, sufficiently clear definitions are vital for all science. As Aristotle noted, definitions identify the essence of a type of entity.<sup>19</sup> From that perspective, all acts of definition are essentialist. Notwithstanding other defences of definition, such as those from a nominalist philosophical perspective (Robinson 1950), tirades against vaguely-defined ‘essentialism’ in the social sciences since the 1980s have caused enormous damage, undermining the vital scientific tasks of definitional refinement.<sup>20</sup>

But a problem in Aristotle’s approach is his *natural state model*. This is his additional assumption that a kind has a natural state, and variations from that state are caused by

---

<sup>17</sup> Of course, Marx acknowledged the importance of credit and the financial system in his conception of capitalism. But he paid much less attention to the importance within capitalism of property as collateral (Hodgson 2015c), and even less to the buying and selling of debt. He did not highlight the laws and institutions required to make the widespread trading of debt feasible. Furthermore, Marx (1976, p. 274, n. 4) wrote: The capitalist epoch is therefore characterized by the fact that labour-power ... takes on the form of a commodity’ involving ‘wage-labour.’ Accordingly, Marx (1976, pp. 875-6) saw the rise of ‘the capitalist era’ as dating ‘from the sixteenth century’, its ‘starting point’ being that which ‘gave rise to the wage-labourer and to the capitalist’. There is no reference to the financial system or extensive buying or selling of debt here; the latter emerged much later, in the eighteenth century, at a time when the collateralization of land also became more widespread (Hodgson 2015a, pp. 123, 161-4).

<sup>18</sup> Note that point (6) can be interpreted in terms of the dominance of ‘capital’, as long as that word is used in the everyday business sense of the money value of collateralizable assets, plus money itself, and not in the much-widened sense of ‘anything durable and useful’ as employed by economists and sociologists. See Hodgson (2014, 2015a) and Piketty (2014) for arguments for returning to a money-oriented definition.

<sup>19</sup> The familiar definition of a mammal as an animal that suckles its young is a remarkably short account. It works because this simple descriptive demarcation serves to divide the mammalian evolutionary lineage from other classes of animal. This case reinforces the point that a definition does not contain everything that is vital. In other cases, as often in the social sciences, the elucidation of definitions is even more difficult. See Hodgson (2015b) for a discussion of why this is the case (and a note that the formerly prevalent definition of a mammal has recently been altered to deal with problems of demarcation with fossil evidence).

<sup>20</sup> Note that Robinson’s (1950) ostensibly nominalist defence of definition is unable to address ‘population thinking’ and the core problem (frequent in both biology and social science) of demarcating between different populations, where there is substantial permanent variation within types as well as between them.

interfering events or forces. In Darwinian *population thinking*, variation is regarded as a key feature of a group of entities of a specific type. Population thinking can be reconciled with essentialism once the natural state model is rejected. Contrary to much Marxist and some pro-market discourse, we cannot focus on a single (existing or imagined) type of capitalism and simply assume that it represents its pure or natural state.

As with the classification of animal species, it is possible to have nested definitions with different degrees of generality. Here we focus on the type of socio-economic system that was consolidated in the eighteenth century in parts of Western Europe and led eventually to an enormous explosion in productivity and innovation. It is reasonable to describe that system as capitalist. Hence the definition of capitalism should in part entail properties of the system that emerged around the eighteenth century and led to a huge acceleration of economic growth.

Definitions are partly a matter of analytical usefulness, for the purposes of clarity and effective scientific conversation. Science is a social process, resting on communication between participants. Avoiding definitions impairs communication and the progress of science. Although definitions are affected by analysis, they are neither descriptions nor analyses. While definitions refer to the *essence*, they do not list everything that is *essential* (in the everyday sense of *vital*) for the type to exist. Classificatory definitions focus on the minimum number of common features of a meaningful kind of entity, in order to demarcate it from other kinds (Belnap 1993).

There is no fixed tool-kit for making definitions, but they should ideally be based on underlying structures and relations, rather than secondary attributes or functional outcomes. Definitions are ill-based on behaviours. A problem is that if the behaviour is interrupted, then the definition suggests that the entity no longer of that type. Some exceptions occur when those functions are permanent and act as reliable correlates of essential and shared structural characteristics, but generally definitions focus on dispositional properties.

Some features may be vital or important but unnecessary to define the phenomena. What is vital to an entity is often not part of its essence. Such features have to be included at the theoretical rather than the definitional stage. Definitions of a kind do not imply that members of that kind are similar, but it does imply that there is some minimal communality in terms of their essence.

But while stressing the importance of definitions, we should not be naïve enough to believe that absolute precision or universal agreement are possible, or even desirable. When it comes to the social sciences the issue is even more difficult because the phenomena that we are trying to define in terms of words and ideas, themselves involve words and ideas.

Classification, as well as explanation, is basic to science. All sciences have to deal with both sameness and difference. As biologists Richard Levins and Richard Lewontin (1985, p. 141) put it: ‘Things are similar: this makes science possible. Things are different: this makes science necessary.’ Definitions are vital as a means of classification, without ignoring differences within types. Definitions build on sufficient similarity, and hence make science possible.

Research on varieties of capitalism can be accommodated within the approach outlined here. It has hopefully been demonstrated that capitalism is a viable and historically specific category, not despite but fully in accord with the variety of forms that it has taken both historically and geographically.

## References

- Aglietta, Michel (1979) *A Theory of Capitalist Regulation: The US Experience*, translated by David Fernbach from the French edition of 1976 (London: NLB).
- Albert, Michel (1993) *Capitalism against Capitalism* (London: Whurr Publishers).
- Albritton, Robert (1991) *A Japanese Approach to Stages of Capitalist Development* (London: Macmillan).
- Althusser, Louis (1969) *For Marx*, translated from the French edition of 1965 by Ben Brewster (London: Allen Lane).
- Amable, Bruno (2000) 'Institutional Complementarity and Diversity of Social Systems of Innovation and Production', *Review of International Political Economy*, 7(4), Winter, pp. 645-87.
- Amable, Bruno (2003) *The Diversity of Modern Capitalism* (Oxford and New York: Oxford University Press).
- Amin, Ash (ed.) (1994) *Post-Fordism: A Reader* (Oxford: Basil Blackwell).
- Aoki, Masahiko (2001) *Toward a Comparative Institutional Analysis* (Cambridge, MA: MIT Press).
- Aristotle (1901) *Aristotle's Posterior Analytics*, translated E. S. Bouchier (Oxford: Blackwell).
- Assiter, Alison (1996) *Enlightened Women: Modernist Feminism in a Postmodern Age* (London and New York: Routledge).
- Bagehot, Walter (1919) *Lombard Street: A Description of the Money Market* (first edition 1873) (London: Murray).
- Barthes, Roland (1972) *Mythologies*, translated from the French edition of 1957 (New York: Hill and Wang).
- Belnap, Nuel D. (1993) 'On Rigorous Definitions', *Philosophical Studies*, 72(2/3), December, pp. 115-46.
- Berger, Suzanne and Dore, Ronald (eds) (1996) *National Diversity and Global Capitalism* (Ithaca: Cornell University Press).
- Block, Fred (2003) 'Karl Polanyi and the Writing of *The Great Transformation*', *Theory and Society*, 32(3), June. pp. 275-306.
- Block, Fred (2012) 'Varieties of what? Should we still be using the concept of capitalism?' *Political Power and Social Theory*, 23, pp.269-291.
- Bohle, Dorethee and Greskovits, Béla (2012) *Capitalist Diversity on Europe's Periphery* (Ithaca and London: Cornell University Press).
- Boyer, Robert (1999) 'The Variety and Dynamics of Capitalism', in Groenewegen, John and Vromen, Jack J. (eds) (1999) *Institutions and the Evolution of Capitalism: Implications of Evolutionary Economics* (Cheltenham: Edward Elgar), pp. 122-40.
- Burr, Vivien (1995) *An Introduction to Social Constructivism* (London and New York: Routledge).

- Chibber, Vivek (2013) *Postcolonial Theory and the Specter of Capital* (London and New York: Verso).
- Coates, David (ed.) (2005) *Varieties of Capitalism: Varieties of Approaches* (London and New York: Palgrave Macmillan).
- Commons, John R. (1924) *Legal Foundations of Capitalism* (New York: Macmillan).
- Costanza, Robert, Ida Kubiszewski, Enrico Giovannini, Hunter Lovins, Jacqueline McGlade, Kate E. Pickett, Kristín Vala Ragnarsdóttir, Debra Roberts, Roberto De Vogli and Richard Wilkinson (2014) 'Time to Leave GDP Behind', *Nature*, 505, 16 January, pp. 283–285.
- Crouch, Colin (2005) *Capitalist Diversity and Change* (Oxford and New York: Oxford University Press).
- Crouch, Colin and Streeck, Wolfgang (eds) (1997) *Political Economy of Modern Capitalism: Mapping Convergence and Diversity* (London UK and Thousand Oaks CA: Sage).
- Darwin, Charles R. (1859) *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* (London: Murray).
- Deaton, Angus (2013) *The Great Escape: Health, Wealth, and the Origins of Inequality* (Princeton: Princeton University Press).
- Dewey, John (1929) *The Quest for Certainty: A Study of the Relation of Knowledge and Action* (New York: Minton, Balch).
- Dickson, Peter G. M. (1967) *The Financial Revolution in England: A Study in the Development of Public Credit, 1688-1756* (London: Macmillan).
- Dore, Ronald (2000) *Stock Market Capitalism: Welfare Capitalism: Japan and Germany versus the Anglo Saxons* (Oxford: Oxford University Press).
- Elster, Jon (1986) 'The Theory of Combined and Uneven Development: A Critique' in John Roemer (ed.) (1986) *Analytical Marxism* (Cambridge and New York: Cambridge University Press), pp. 54–63.
- Fogel, Robert W. (2004) *The Escape from Hunger and Premature Death, 1700-2100: Europe, America, and the Third World* (Cambridge: Cambridge University Press).
- Fukuyama, Francis (1992) *The End of History and the Last Man* (New York: Free Press).
- Fuss, Diana (1989) *Essentially Speaking: Feminism, Nature and Difference* (London and New York: Routledge).
- Gagliardi, Francesca (2009) 'Financial Development and the Growth of Cooperative Firms', *Small Business Economics*, 32(4), April, pp. 439-64.
- Galbraith, John Kenneth (1952) *American Capitalism: The Concept of Countervailing Power* (Boston: Houghton Mifflin).
- Gibson-Graham, J. K. (2006) *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy*, new edition (Minneapolis MN: University of Minnesota Press).
- Godfrey-Smith, Peter (2009) *Darwinian Populations and Natural Selection* (Oxford: Oxford University Press).
- Hacking, Ian (1999) *The Social Construction of What?* (Cambridge, MA: Harvard University Press).

- Hall, Peter A. and Soskice, David (eds) (2001) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (Oxford: Oxford University Press).
- Hindess, Barry (1987) *Freedom, Equality and the Market* (London: Tavistock).
- Hodgson, Geoffrey M. (1988) *Economics and Institutions: A Manifesto for a Modern Institutional Economics* (Cambridge and Philadelphia: Polity Press and University of Pennsylvania Press).
- Hodgson, Geoffrey M. (1993) *Economics and Evolution: Bringing Life Back Into Economics* (Cambridge, UK and Ann Arbor, MI: Polity Press and University of Michigan Press).
- Hodgson, Geoffrey M. (1996) 'Varieties of Capitalism and Varieties of Economic Theory', *Review of International Political Economy*, 3(3), Autumn, pp. 381-434.
- Hodgson, Geoffrey M. (2004) *The Evolution of Institutional Economics: Agency, Structure and Darwinism in American Institutionalism* (London and New York: Routledge).
- Hodgson, Geoffrey M. (2014) 'What is Capital? Economists and Sociologists have Changed its Meaning – Should it be Changed Back?' *Cambridge Journal of Economics*, 38(5), September, pp. 1063-86.
- Hodgson, Geoffrey M. (2015a) *Conceptualizing Capitalism: Institutions, Evolution, Future* (Chicago: University of Chicago Press).
- Hodgson, Geoffrey M. (2015b) 'On Defining Institutions: Rules *versus* Equilibria', *Journal of Institutional Economics*, 11(3), September 2015, pp. 499-505.
- Hodgson, Geoffrey M. (2015c) 'Much of the "Economics of Property Rights" Devalues Property and Legal Rights', *Journal of Institutional Economics*, 11(4), December, pp. 683-709.
- Hodgson, Geoffrey M. and Knudsen, Thorbjørn (2010) *Darwin's Conjecture: The Search for General Principles of Social and Economic Evolution* (Chicago: University of Chicago Press).
- Hull, David L. (1965) 'The Effect of Essentialism on Taxonomy: 2000 Years of Stasis', *British Journal for the Philosophy of Science*, **15**, pp. 314-16, **16**, pp. 1-18.
- Ingham, Geoffrey (2008) *Capitalism* (Cambridge: Polity Press).
- Kindleberger, Charles P. (1984) *A Financial History of Western Europe* (London: George Allen and Unwin).
- Kirman, Alan P. (1992) 'Whom or What Does the Representative Individual Represent?', *Journal of Economic Perspectives*, **6**(2), Spring, pp. 117-36.
- Kripke, Saul (1972) 'Naming and Necessity', in Davidson, D. and Harman, G. (eds) (1972) *Semantics of Natural Languages* (Dordrecht: Reidel), pp. 253-355, 763-9.
- Laclau, Ernesto and Mouffe, Chantal (1985) *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics* (London: Verso).
- Levins, Richard and Lewontin, Richard C. (1985) *The Dialectical Biologist* (Cambridge, MA: Harvard University Press).
- Lindert, Peter H. and Williamson, Jeffrey G. (1982) 'Revising England's Social Tables, 1688-1812', *Explorations in Economic History*, 19(4), October, pp. 385-408.
- Macfarlane, Alan (1978) *The Origins of English Individualism* (Oxford: Basil Blackwell).

- Maddison, Angus (2007) *Contours of the World Economy, 1–2030 AD: Essays in Macro-Economic History* (Oxford and New York: Oxford University Press).
- Marx, Karl (1976) *Capital*, vol. 1, translated from the fourth German edition of 1890 (Harmondsworth: Pelican).
- Marx, Karl (1981) *Capital*, vol. 3, translated from the German edition of 1894 (Harmondsworth: Pelican).
- Mayr, Ernst (1963) *Animal Species and Evolution* (Cambridge, MA: Harvard University Press).
- Mayr, Ernst (1964) ‘Introduction’, in facsimile of the first edition of Darwin, Charles R. (1859) *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* (London: Murray), pp. vii–xxvii.
- Mayr, Ernst (1976) *Evolution and the Diversity of Life: Selected Essays* (Cambridge, MA: Harvard University Press).
- Mayr, Ernst (1982) *The Growth of Biological Thought: Diversity, Evolution, and Inheritance* (Cambridge, MA: Harvard University Press).
- Mayr, Ernst (1988) *Toward a New Philosophy of Biology: Observations of an Evolutionist* (Cambridge, MA and London: Harvard University Press).
- McCloskey, Deirdre N. (2010) *Bourgeois Dignity: Why Economics Can’t Explain the Modern World* (Chicago: University of Chicago Press).
- Meikle, Scott (1985) *Essentialism in the Thought of Karl Marx* (London: Duckworth).
- Metcalfe, J. Stanley (1988) ‘Evolution and Economic Change’, in Silberston, Aubrey (ed.) (1988) *Technology and Economic Progress* (Basingstoke: Macmillan), pp. 54-85.
- Milanovic, Branko (2011) ‘A Short History of Global Inequality: The Past Two Centuries’, *Explorations in Economic History*, 48(4), December, pp. 494-506.
- Nelson, Richard R. (1991) ‘Why Do Firms Differ, and How Does it Matter?’ *Strategic Management Journal*, **12**, Special Issue, Winter, pp. 61-74.
- Nussbaum, Martha C. (1992) ‘Human Functioning and Social Justice: In Defense of Aristotelian Essentialism’, *Political Theory*, 20(2), May, pp. 202-46.
- O’Neill, John (1998) *The Market: Ethics, Knowledge and Politics* (London and New York: Routledge).
- O’Neill, John (2001) ‘Essences and Markets’, in Mäki, Uskali (ed.) (2001) *The Economic World View: Studies in the Ontology of Economics* (Cambridge: Cambridge University Press), pp. 157-73.
- Peirce, Charles Sanders (1878) ‘How to Make Our Ideas Clear’, *Popular Science Monthly*, **12**, January, pp. 286-302.
- Piketty, Thomas (2014) *Capital in the Twenty-First Century* (Cambridge, MA: Belknap Press).
- Polanyi, Karl (1944) *The Great Transformation: The Political and Economic Origins of Our Time* (New York: Rinehart).
- Polanyi, Karl, Arensberg, Conrad M. and Pearson, Harry W. (eds) (1957) *Trade and Market in the Early Empires* (Chicago: Henry Regnery).

- Popper, Karl R. (1945) *The Open Society and Its Enemies*, 2 vols (London: Routledge and Kegan Paul).
- Popper, Karl R. (1963) *Conjectures and Refutations* (London: Routledge and Kegan Paul).
- Popper, Karl R. (1972) *Objective Knowledge: An Evolutionary Approach* (Oxford: Oxford University Press).
- Powell, Ellis T. (1915) *The Evolution of the Money Market (1385-1915): An Historical and Analytical Study of the Rise and Development of Finance as a Centralised, Co-ordinated Force* (London: Financial Press).
- Putnam, Hilary (1975) 'The Meaning of 'Meaning'', in Putnam, Hilary (1975) *Mind, Language and Reality* (Cambridge: Cambridge University Press), pp. 215-71.
- Quine, Willard van Orman (1960) *Word and Object* (Cambridge, MA: Harvard University Press).
- Quine, Willard van Orman (1966) *The Ways of Paradox and Other Essays* (New York: Random House).
- Rasmussen, Douglas B. (1984) 'Quine and Aristotelian Essentialism', *The New Scholasticism*, **58**(5), Summer, pp. 316-35.
- Resnick, Stephen A. and Wolff, Richard D. (1987) *Knowledge and Class: A Marxian Critique of Political Economy* (Chicago: University of Chicago Press).
- Riley, James C. (2001) *Rising Life Expectancy: A Global History* (Cambridge: Cambridge University Press).
- Robinson, Richard (1950) *Definition* (Oxford: Clarendon Press).
- Rorty, Richard (1979) *Philosophy and the Mirror of Nature* (Princeton: Princeton University Press).
- Rosenberg, Justin (2010) 'Basic Problems in the Theory of Uneven and Combined Development. Part II: Unevenness and Political Multiplicity', *Cambridge Review of International Affairs*, 23(1), pp. 165-89.
- Roseveare, Henry G. (1991) *The Financial Revolution, 1660-1760* (Harlow: Longman).
- Sayer, Andrew (1997) 'Essentialism, Social Constructivism and Beyond', *Sociological Review*, **45**(3), August, pp. 453-87.
- Schumpeter, Joseph A. (1942) *Capitalism, Socialism and Democracy* (London: George Allen and Unwin).
- Sober, Elliott (1980) 'Evolution, Population Thinking and Essentialism', *Philosophy of Science*, 47(3), September, pp. 350-83.
- Sober, Elliott (1984) *The Nature of Selection: Evolutionary Theory in Philosophical Focus* (Cambridge, MA: MIT Press).
- Streeck, Wolfgang (2011) 'E Pluribus Unum? Varieties and Commonalities of Capitalism', in Mark Granovetter (ed.) (2011) *The Sociology of Economic Life*, 3<sup>rd</sup> edn. (Boulder CO: Westview), pp. 419-55.
- Streeck, Wolfgang (2012) 'On Fred Block, Varieties of What? Should We Still Be Using the Concept of Capitalism?' *Political Power and Social Theory*, 23, pp. 311-321.

- Streeck, Wolfgang (2014) *Buying Time: The Delayed Crisis of Democratic Capitalism* (London and New York: Verso).
- Streeck, Wolfgang and Yamamura, Kozo (eds) (2001) *The Origins of Neoliberal Capitalism: Germany and Japan in Comparison* (Ithaca, NY: Cornell University Press).
- Temin, Peter (2001) 'A Market Economy in the Early Roman Empire', *Journal of Roman Studies*, **91**, pp. 169-81.
- Temin, Peter (2002) 'Price Behavior in Ancient Babylon', *Explorations in Economic History*, 39(1), pp. 46-60.
- Temin, Peter (2006) 'The Economy of the Early Roman Empire', *Journal of Economic Perspectives*, **20**(1), Spring, pp. 133-51.
- Thompson, Edward P. (1978) *The Poverty of Theory and Other Essays* (London: Merlin).
- Tomlinson, James (1982) *The Unequal Struggle? British Socialism and the Capitalist Enterprise* (London: Methuen).
- Trotsky, Leon D. (1934) *The History of the Russian Revolution* (London: Gollancz).
- Trotsky, Leon D. (1936) *The Third International After Lenin* (New York: Pioneer).
- Veblen, Thorstein B. (1908) 'Professor Clark's Economics', *Quarterly Journal of Economics*, **22**(2), February, pp. 147-95.
- Veblen, Thorstein B. (1925) 'Economic Theory in the Calculable Future', *American Economic Review (Papers and Proceedings)*, **15**(1), March, pp. 48-55.
- Wennerlind, Carl (2011) *Casualties of Credit: The English Financial Revolution 1620-1720* (Cambridge MA: Harvard University Press).
- White, Nicholas P. (1972) 'Origins of Aristotle's Essentialism', *Review of Metaphysics*, 26 (1), pp. 57-85.
- Whitley, Richard (1999) *Divergent Capitalisms: The Social Structuring and Change of Business Systems* (Oxford and New York: Oxford University Press).
- Wilkins, John S. (2009) *Species: A History of the Idea* (Berkeley, CA: University of California Press).
- Wilkins, John S. (2012) 'Did Popper and Quine Invent "Aristotelian Essentialism"?', *Evolving Thoughts*, 7 February. <http://evolvingthoughts.net/2012/02/did-popper-and-quine-invent-aristotelian-essentialism/#more-6024>. Retrieved 16 February 2012.
- Wittgenstein, Ludwig (1960) *Blue Book* (Oxford: Basil Blackwell).